DAILY FIELD ACTIVITY REPORT

PROJECT NAME: Pre-Remedial Design Investigation and Baseline Sampling, Portland Harbor Superfund Site

DATE: April 27, 2018	**WEATHER:** Overcast with showers, High ~55 degrees F

Personnel and Visitors Onsite:
Research vessel Tieton - CDM Smith: Julee Trump; AECOM: Anthony Palmieri; Geosyntec: Erin Dunbar; Gravity Marine: Rene Trudeau, Maggie Mckeon.

Research vessel Cayuse – CDM Smith: Jason Silvertooth; AECOM: Michaela McCoog; Geosyntec: Alison Clements; Gravity Marine: John Schaefer, Jeff Schut

Planned Activity:

- Collect surface sediment samples at stratified random sample locations between river mile (RM) 9 and 11.3 E.

Activity Completed:
A tailgate safety meeting was led by AECOM. Topics included using 3 points of contact when onboarding and offboarding, potential sharps in sediment samples, debris in the river, and avoiding complacency. The emergency procedures during fires and a sinking boat were also reviewed.

Julee Trump performed oversight of surface sediment sampling at random stratified locations from 08:00 to 17:35 on board the Tieton. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- Position checks at PH-2 indicated that the vessel GPS was reading within 1.5 meters of the PH-2 survey coordinates, meeting the 1-2 m accuracy specification in the FSP.
- 3-point composite surface sediment samples were collected from 5 random stratified sampling locations between RM 10.3 and 11.7 East as summarized below. Activities included decontamination of sampling equipment using Alconox and deionized/distilled water and housekeeping of the sampling area.
- Additional sample collection was attempted at 2 locations, but samples were not completed as summarized below.
- Duplicate sample was collected as summarized below

Jason Silvertooth performed oversight of surface sediment sampling at random stratified locations on the east side of the Willamette River from 08:00 to 17:30 on board the Cayuse. Specific activities completed by the AECOM/Geosyntec team, with vessel support from Gravity Marine, are as follows:

- GPS position checks were performed at the beginning and end of the day at the PH-2 pile at the Fred Devine property.
- 3-point composite surface sediment samples were collected from four random stratified sampling locations between RM 9 and 10 E as summarized below. Between sampling locations all sampling equipment was decontaminated using Alconox and deionized/distilled water.
- Two locations were skipped (SG-B319 and SG-B320) after the first sediment grab had recovery of <20 cm.

Status of Schedule & Priority Work:

- The random stratified sampling will continue through the weekend to complete targeted locations on the west side of the river sampling and return to skipped locations throughout the river. AECOM/Geosyntec are focusing on locations were good recovery is easily achieved, and occasionally skipping locations they feel they may be able to get better recoveries with different equipment. SMA sampling may begin before stratified random sampling is complete if access agreements and sampling procedures are not resolved in time to sample at applicable locations.
- Locations on private property are being skipped until access agreements are obtained.
- Sample locations in areas of known/encountered heavy sheen contamination are planned to be skipped and returned to with support from NRC Environmental Services to contain sheen during sampling.
- Sampling is taking more time than initially projected.

Issues/Concerns/Resolutions (include work performed that was not planned or anticipated):
At locations SG-B319 and SG-B320, the first sediment grab contained recoveries of 16 and 17 cm, respectively. CDM Smith notified the sampling team that in these instances, they are requested to implement the sampling protocol provided by EPA on 4/20/18, or move on to another location until the PRP group comes to an agreement with EPA regarding sampling protocol for recoveries of <20 cm. In both instances the AECOM/Geosyntec sampling crew called

project management to discuss the situation and get direction. Their project management directed them not to implement the EPA sampling protocol and asked some clarification questions to CDM Smith regarding the EPA protocol. CDM Smith answered the clarification questions but deferred to EPA for discussions and opinions on the sampling protocol and sampling equipment. Ultimately a decision was made by the field crew to move to another location to avoid a potential shutdown that could occur if protocols are implemented that have not been approved by EPA. **CDM Smith pointed out to EPA the risks of AECOM/Geosyntec project management directly contacting the field oversight staff to debate EPA's directives on sampling and pressure them into changing protocols on the boat without involvement of EPA and their technical support.**

The following locations were attempted and abandoned on the Tieton for later attempt either with larger equipment or at an alternate location to be determined by AECOM/Geosyntec:

- SG-B399 – 5 total grabs, 1 grab with 16 cm recovery, 4 grabs were washed-out due to rocks in the jaws, EPA's sampling plan was followed, but due to the 4 washed-out grabs, the one aliquot was discarded.
- SG-B391 – 6 total grabs: 2 grabs just over 20 cm recovery were very gravely; 4 grabs were washed-out due to rocks holding the jaws open. The two aliquots were discarded

AECOM is implementing new procedures for sample attempts required per location as previously submitted to the EPA, but not approved. As outlined above only 5 grabs were made at SG-B339 which is inconsistent with the FSP, which called for 3 sample attempts in the 25 ft radius and 3 more in the 50 ft radius. Additionally, AECOM verbally expressed multiple times it was their intention to move to an alternate location after only 2 failed grabs in the 25 FT radius due to washout and 1 failed grab in the 50 FT radius due to washout. Oversight inspectors pointed out that this is inconsistent with the FSP and EPA expectations. AECOM replied that it was never the intention to make more than 9 attempts per grid (3 attempts at the primary location, 3 attempts at alternate 1 and 3 attempts at alternate 2). This is AECOM statement is not consistent with previous oversight observations or AECOM statements on the topic.

Samples Collected, Measurements Made, Photographs: (List Locations, Matrix & Sample type):

On the Cayuse, stratified random surface sediment samples were collected at following locations between RM 9 and 10 E:

- PDI-SG-B312-BL1 – Within 25 ft radius, sandy silt with gravel
- PDI-SG-B328-BL1 – Within 25 ft radius, sandy silt
- PDI-SG-B331-BL1 – Within 25 ft radius, sandy silt, MS/MSD collected
- PDI-SG-B336-BL1 – Within 25 ft radius, silt with trace sand

Note: Sediment descriptions are simplified and AECOM/Geosyntec provided more detailed sediment descriptions in their sampling notes.

On the Tieton, stratified random surface sediment samples were collected between RM 9.2 and 11.7 West, and in the western portion of the navigation channel:

- PDI-SG-B388-BL1 – Alternate 1 location sampled within 25 FT radius: sandy silt, trace organics, orange modeling. The primary location was sandy silt and silty sand, but cobbles prevented 5 out of 7 grabs from closing, causing all sediments to washout.
- PDI-SG-B375-BL1 – Within 25 ft radius, slightly sandy silt, with trace organics
- PDI-SG-B376-BL1 – Within 25 ft radius, slightly sandy silt with sand lenses, trace organic/woody debris, trace organic sheen
- PDI-SG-B369-BL1 – Within 25 ft radius, slightly sandy silt, trace organics, trace organic sheen
- PDI-SG-B365-BL1 – Within 25 ft radius, slightly sandy silt with sand lenses, trace organics, trace organic sheen

Note: Sediment descriptions are simplified, but AECOM/Geosyntec documented using USCS descriptions.

Photographs of work were taken throughout the day and provided to EPA via email. Additional photos were taken and archived with a description included in the photolog Excel spreadsheet, which are maintained electronically in the ProjectWise project folder.

Borings Completed (Include total footage drilled for each boring):

None

Wastes Generated and How Handled:

- Excess sediment and debris in the power grab sampler and in the sampling bowls was rinsed back into the river per the FSP. No heavy sheen was observed.
- Disposable gloves, paper towels, and other general trash was containerized in a trash bag and removed daily as needed for disposal to a municipal waste management dumpster.

Health and Safety Issues, Equipment Needs, Staffing:
None

Signature: Jason Silvertooth, Julee Trump **DATE** April 27, 2018